

WHAT IS CLAIMED IS:

1. A dye-containing curable composition containing at least an alkali soluble binder, an organic-solvent-soluble dye, a radiation-sensitive compound and a metal complex of a transition element in which the maximum value of a molar absorption coefficient  $\epsilon$  in a visible light range is smaller than that of the organic-solvent-soluble dye.

2. The dye-containing curable composition according to claim 1, wherein the molecular weight of one ligand in the metal complex of a transition element is 20 or more and less than 300.

3. The dye-containing curable composition according to claim 1, wherein the metal complex of a transition element is obtained by coordinating a ligand in which the maximum value of a molar absorption coefficient  $\epsilon$  in a visible light range is 0 to 3000 by the single ligand, on a transition metal.

4. The dye-containing curable composition according

to claims 1, wherein a ligand of the metal complex of a transition element is a ligand not containing an aromatic ring.

5. The dye-containing curable composition according to claim 1, wherein the radiation-sensitive compound is at least one kind selected from a photopolymerization initiator and a photo-acid-generating agent, and the dye-containing curable composition is structured as a negative-type dye-containing curable composition.

6. The dye-containing curable composition according to claim 5, further comprising a monomer.

7. The dye-containing curable composition according to claim 1, wherein the radiation-sensitive compound is a photo-acid-generating agent, and the dye-containing curable composition is structured as a positive-type dye-containing curable composition.

8. The dye-containing curable composition according to claim 1, wherein the radiation-sensitive compound is an o-quinone-diazide compound, and the dye-containing curable

composition is structured as a positive-type dye-containing curable composition.

9. The dye-containing curable composition according to claim 1, further comprising a cross-linking agent.

10. A color filter prepared by using a dye-containing curable composition containing at least an alkali soluble binder, an organic-solvent-soluble dye, a radiation-sensitive compound and a metal complex of a transition element in which the maximum value of a molar absorption coefficient  $\epsilon$  in a visible light range is smaller than that of the organic-solvent-soluble.

11. The color filter according to claim 10, wherein the radiation-sensitive compound is at least one kind selected from a photopolymerization initiator and a photo-acid-generating agent, and the dye-containing curable composition is structured as a negative-type dye-containing curable composition.

12. The color filter according to claim 11, wherein the dye-containing curable composition comprises a monomer.

13. The color filter according to claim 10, wherein the radiation-sensitive compound is a photo-acid-generating agent, and the dye-containing curable composition is structured as a positive-type dye-containing curable composition.

14. The color filter according to claim 10, wherein the radiation-sensitive compound is an o-quinone-diazide compound, and the dye-containing curable composition is structured as a positive-type dye-containing curable composition.

15. The color filter according to claim 10, wherein the dye-containing curable composition comprises a cross-linking agent.

16. A process of preparing a color filter comprising the steps of: applying a dye-containing curable composition containing at least an alkali soluble binder, an organic-solvent-soluble dye, a radiation-sensitive compound and a metal complex of a transition element in which the maximum value of a molar absorption coefficient  $\epsilon$  in a visible

light range is smaller than that of the organic-solvent-soluble on a substrate; exposing the dye-containing curable composition through a mask; and forming a pattern image by development.

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17. The process of preparing a color filter according to claim 16, wherein the radiation-sensitive compound is at least one kind selected from a photopolymerization initiator and a photo-acid-generating agent, and the dye-containing curable composition is structured as a negative-type dye-containing curable composition.

18. The process of preparing a color filter according to claim 17, wherein the dye-containing curable composition comprises a monomer.

19. The process of preparing a color filter according to claim 16, wherein the radiation-sensitive compound is a photo-acid-generating agent, and the dye-containing curable composition is structured as a positive-type dye-containing curable composition.

20. The process of preparing a color filter according to claim 16, wherein the radiation-sensitive compound is an o-quinone-diazide compound, and the dye-containing curable composition is structured as a positive-type dye-containing curable composition.

21. The process of preparing a color filter according to claim 16, wherein the dye-containing curable composition comprises a cross-linking agent.